

DECLARATION FOR PATENT APPLICATION

Attorney Docket No: **062020-1430**

As the below named inventor(s), I/we hereby declare that:

Our residences, post office addresses and citizenships are as stated below next to our names.

We believe we are the original, first, and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled **PIEZOELECTRIC ON SEMICONDUCTOR-ON-INSULATOR MICROELECTROMECHANICAL RESONATORS AND METHODS OF FABRICATION**, the specification of which:

☒ is attached hereto.
☐ was filed on as _____ Application Serial No. _____.
☐ was filed on _____ under U.S. Express Mail No. _____.
☐ is set forth in PCT International Application No. _____;
filed on _____ and as amended Under PCT Article 19 on _____ (if any).

I/we hereby state that I/we have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I/we hereby claim foreign priority benefits under Title 35, United States Code, 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America listed below and have also identified below any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed: **NOT APPLICABLE**.

I/we hereby appoint all attorneys and agents of Thomas, Kayden, Horstemeyer & Risley, LLP, who are listed under the USPTO Customer Number shown below as my/our attorneys and agents to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys and agents listed under that Customer Number may be changed from time to time at the sole discretion of Thomas, Kayden, Horstemeyer & Risley, LLP, and request that all correspondence be addressed to the address filed under the same USPTO Customer Number.

24504

Please address all telephone calls, in the first instance, to **Scott A. Horstemeyer** at telephone number: (770) 933-9500.

Address all correspondence to:

**Scott A. Horstemeyer
THOMAS, KAYDEN, HORSTEMEYER
& RISLEY, L.L.P.
100 Galleria Parkway, N.W., Suite 1750
Atlanta, Georgia 30339-5948**

I/we hereby declare that all statements made herein of my/our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statement and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of First Inventor: Farrokh Avazi

Residence: 1130 Piedmont Avenue, N.E., #612, Atlanta, Ga. 30309

Citizenship: Iran

Post Office Address: _____

Inventor's Signature: _____

Farrokh Avazi

Date: _____

July 25th, 2003

Full Name of Second Inventor: Gianluca Piazza

Residence: Via Marzagalli 18. Lodi 26900 Italy

Citizenship: Italy

Post Office Address: _____

Inventor's Signature: Charles Rame

Date: 7/28/2003

Full Name of Third Inventor Reza Abdolvand

Residence: 329152 Georgia Tech Station. Atlanta. Ga. 30332

Citizenship: Iran

Post Office Address: _____

Inventor's Signature: *R. Abdolvand*

Date: JULY 25, 2003

Full Name of Fourth Inventor: Gavin Kar-Fai Ho

Residence: 202 Hunnicutt Street N.W., Atlanta, Ga. 30313-2025

Citizenship: Canada

Post Office Address: _____

Inventor's Signature: _____



Date: JULY 25, 2003

Full Name of Fifth Inventor: Shweta Humad

Residence: 334895 Georgia Tech Station, Atlanta, Ga. 30332

Citizenship: India

Post Office Address: _____

Inventor's Signature: _____



Date: _____

July 25th, 2003

**ASSIGNMENT
OF UTILITY PATENT APPLICATION**

WHEREAS, the following parties:

| <u>Name</u> | <u>Address</u> |
|------------------|---|
| Farrokh Ayazi | 1130 Piedmont Avenue, N.E., #612 Atlanta, GA 30309 |
| Gianluca Piazza | Via Marzagalli 18 Lodi 26900 Italy |
| Reza Abdolvand | 329152 Georgia Tech Station Atlanta, GA 30332 |
| Gavin Kar-Fai Ho | 202 Hunnicutt St NW Atlanta, GA 30313-2025 |
| Shweta Humad | 334895 Georgia Tech Station Atlanta GA 30332 |

hereinafter referred to as ASSIGNOR, has/have invented certain new and useful improvements ("invention(s)") as described and set forth in the below-identified utility application for United States Letters Patent entitled:

**PIEZOELECTRIC ON SEMICONDUCTOR-ON-INSULATOR
MICROELECTROMECHANICAL RESONATORS AND METHODS OF
FABRICATION,**

which was:

- ☒ executed on even date herewith,
- ☐ filed with the United States Patent and Trademark Office (USPTO) on _____, and assigned Serial No. _____, and
- ☒ further described in U.S. Provisional application entitled Method Of Fabrication For Piezoelectrically-Transduced Soi-Based Single-Crystal-Silicon Micro-Electro-Mechanical Resonators With Electrostatic Frequency Tuning Mechanism, filed with the USPTO on August 1, 2002, and assigned Serial No. 60/400,030.

Note: Only one of the first two checkboxes will be checked. The third checkbox will be checked, only if appropriate.

WHEREAS, GEORGIA TECH RESEARCH CORPORATION, having a place of business at 505 Tenth Street NW. Atlanta, Georgia 30332-0415, hereinafter referred to as ASSIGNEE, is desirous of acquiring ASSIGNOR'S interest in and to said invention(s), said utility application, said provisional application, and any U.S. and foreign patents which are related to the same.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by ASSIGNOR, ASSIGNOR has sold, assigned and transferred and does hereby sell, assign and transfer unto ASSIGNEE, and ASSIGNEE'S successors and assigns, (a) the entire right, title and interest, for the United States of America, in and to said invention(s), said utility application, and said provisional application and all the rights and privileges in any application and under any and all patents that may be granted in the U.S. for said inventions, including all corresponding provisional, continuation, continuation-in-part, divisional, reissue, and reexamination applications; and (b) the entire right, title and interest in and to said invention(s), said utility application, and said provisional application for all countries foreign to the U.S., including all rights of priority arising from them, and all the rights and privileges under any and all forms of protection, including patents, that may be granted in said countries foreign to the U.S. for them.

ASSIGNOR authorizes ASSIGNEE to make application for such protection in its own name and maintain such protection in any and all countries foreign to the U.S., and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from ASSIGNOR, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

ASSIGNOR hereby consents that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of ASSIGNEE to apply for patent or other form of protection for said inventions, said utility application, or said provisional application and to claim the aforesaid benefit of the right of priority.

ASSIGNOR requests that any and all patents for said inventions be issued to ASSIGNEE in the U.S. and to ASSIGNEE in all countries foreign to the U.S., or to such nominee as ASSIGNEE may designate.

ASSIGNOR covenants and agrees that, when requested, ASSIGNOR shall, without charge to ASSIGNEE but at ASSIGNEE'S expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable, or convenient in connection with the patent applications, patents, or other forms of protection of said invention(s), and for the defense and protection thereof if challenged in the court of law.

ASSIGNOR authorizes ASSIGNEE or its agents to insert, on ASSIGNOR's behalf, the filing date and/or serial number above pertaining to the utility application and/or the provisional application, if not known as of the date of execution of this document.

Gianluca Piazza
Gianluca Piazza

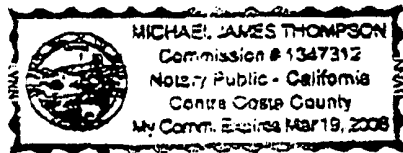
Date: 7/28/2003

United States of America

State of California

County of Alameda

On this 28th day of July, 2003, before me personally came Gianluca Piazza to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.



[Signature]
Notary Public

March 19, 2006
My Commission Expires (Date)

Farrokh Ayazi
Farrokh Ayazi

Date: July 25, 2003

United States of America

State of

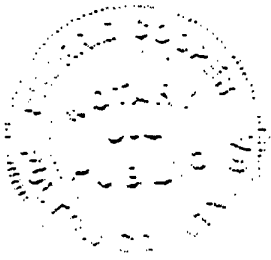
County of

On this 25th day of July, 2003, before me personally came Farrokh Ayazi to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.

Sherrie Cooper
Notary Public

SHERRIE COOPER
NOTARY PUBLIC, FULTON COUNTY, GEORGIA
MY COMMISSION EXPIRES MARCH 24, 2006

My Commission Expires (Date)



Reza Abdolvand
Reza Abdolvand

Date: 7/24/03

United States of America

State of

County of


On this 24th day of July, 20 03, before me personally came Reza Abdolvand to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.

Sherrie Cooper
Notary Public

SHERRIE COOPER
NOTARY PUBLIC, FULTON COUNTY, GEORGIA
MY COMMISSION EXPIRES MARCH 24, 2008

My Commission Expires (Date)




Gavin Kar-Fai Ho

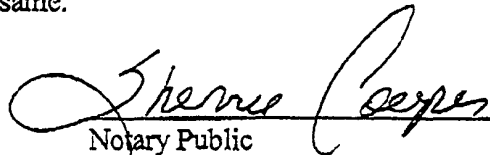
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United States of America

State of

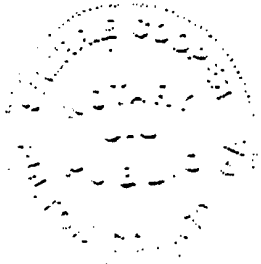
County of

On this 24th day of July, 20 03 before me personally came Gavin Kar-Fai Ho to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.


Notary Public

SHERRIE COOPER
NOTARY PUBLIC, FULTON COUNTY, GEORGIA
MY COMMISSION EXPIRES MARCH 24, 2008

My Commission Expires (Date)





Shweta Humad

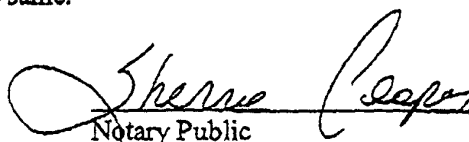
Date: 7/24/03

United States of America

State of

County of

On this 24th day of July, 20 03, before me personally came Shweta Humad to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.



Notary Public

SHERRIE COOPER
NOTARY PUBLIC, FULTON COUNTY, GEORGIA
MY COMMISSION EXPIRES MARCH 24, 2008

My Commission Expires (Date)